

IN THE CLAIMS

Please amend the following claims which are pending in the present application:

1. (Amended) A method of using a mobile communications device to access an on-line service provided by a network server, the method comprising:
accessing a proxy server based service in order to obtain information required by the network server in order to process a request to the on-line service, wherein the request to the on-line service is sent via a secure connection previously established between the mobile communications device and the network server, wherein the secure connection is established by tunneling through the proxy server; and
sending the information to the network server via the secure connection with the network server.
2. (Original) A method as claimed in claim 1, further comprising determining what information is required by the network server in order to process the request.
3. (Previously Presented) A method as claimed in claim 2, wherein determining what information is required by the network server comprises:
sending the request to the network server via the secure connection; and
receiving a response to said request, said response being indicative of the required information.
4. (Original) A method as claimed in claim 3, wherein accessing the proxy based service includes forwarding said response to the proxy server for processing.

5. (Cancelled)

6. (Amended) A method for a proxy server to provide a proxy server based service to a mobile communications device, the method comprising:

receiving a request from the mobile communications device to access the proxy server based service;

processing said request; and

sending the result of said processing to the mobile communications device for forwarding to a network server via a secure connection previously established between the mobile communications device and the network server, wherein the secure connection is established by tunneling through the proxy server.

7. (Previously Presented) A method as claimed in claim 6, wherein the request is the form of a response previously generated by the network server in reply to a request by the mobile communications device to access an on-line service provided by the network server, the method then comprising providing a protocol to understand said response.

8. (Amended) A method for a network server to provide an on-line service to a mobile communications device, the method comprising:

receiving a request from the mobile communications device during a secure connection previously established with the mobile communications device, the request being to the on-line service, wherein the secure connection is established by tunneling through the proxy server;

generating a response to said request, the response indicating additional information that is required by the network server in order to process said request and said response being in a format which is understandable by a proxy server associated with the mobile communications device; and

sending the response to the mobile communications device.

9. (Amended) A mobile communications device, comprising:
a processor;
a memory device having stored therein a code, which when executed by the processor causes the mobile communications device to
allow a user to input a request to an on-line service provided by a network server;
determine whether additional information is required by the network server in order to service the request;
access a proxy server based service in order to obtain any additional information required by the network server; and
send a request to the network server, said request including the additional information, wherein the request is part of a secure connection previously established between the mobile communications device and the network server, wherein the secure connection is encrypted.

10. (Previously Presented) A mobile communications device as claimed in claim 9, wherein the code to determine whether additional information is required by the network server comprises:

instructions to establish the secure connection with the network server;
instructions to send the user input request to the network server via said secure connection; and
instructions to analyze a response to said request, received from the network server, in order to ascertain what additional information is required.

11. (Previously Presented) A mobile communications device as claimed in claim 10, wherein the code to access the proxy server based service comprises instructions to establish a connection with the proxy server, said instructions being executable before the instructions to establish a connection with the network server.

12. (Previously Presented) A mobile communications device as claimed in claim 11, wherein the code to access the proxy based service comprises:

instructions to create a proxy service request based on the response from the network server; and

instructions to send the proxy service request to the proxy server via the connection with the proxy server.

13. (Previously Presented) A mobile communications device as claimed in claim 11, wherein the code to access the proxy based service includes instructions to forward the response from the network server to the proxy server via the connection with the proxy server.

14. (Amended) A proxy server comprising:

a processor; and

a memory device, having stored therein a code, which when executed by the processor causes the proxy server to:

receive a request from a mobile communications device to a proxy server based service;

process the request; and

send the result of said processing to the mobile communications device for forwarding to a network server via a secure connection previously established between the mobile communications device and the network server, wherein the secure connection is encrypted.

15. (Previously Presented) A proxy server as claimed in claim 14, wherein the code has portions which when executed perform a sequence of steps corresponding to a particular proxy service, the code further comprising instructions to execute a portion of the code corresponding to a particular proxy service based on the request from the mobile communications device.

16. (Previously Presented) A proxy server as claimed in claim 14, wherein the memory device further comprises a protocol stored therein to enable the processor to understand the request from the mobile communications device, in the event of said request being generated by an network server.

17. (Amended) A network server, comprising:

a processor; and

a memory device having stored therein executable code, which when executed by the processor causes the network server to

receive a request from a mobile communications device to an on-line service resident on the network server, wherein the request is part of a secure connection previously established between the network server and the mobile communications device, wherein the secure connection is encrypted;

generate a response to said request, the response indicating what additional information is required by the network server in order to process said request and said response being in a format which is understandable by a proxy server associated with the mobile communications device; and

send the response to the mobile communications device.

18. (Amended) A machine readable program storage medium, having stored therein executable code, which when executed on a mobile communications device, performs a method of using the mobile communications device to access an on-line service provided by a network server, the method comprising:

accessing a proxy server based service in order to obtain information required by the network server in order to process a request to the on-line service, wherein the request is part of a secure connection previously established between the mobile communications device and the network server;

sending the information to the network server via a secure connection with the network server, wherein the secure connection is established by bypassing the proxy server.

19. (Original) A machine readable program storage medium as claimed in claim 18, wherein the method further comprises includes first determining what information is required by the network server in order to process the request.

20. (Original) A machine readable program storage medium as claimed in claim 19, wherein determining what information is required by the network server comprises:

 sending the request to the network server in a secure fashion;

 receiving a response to said request, said response being indicative of the required information.

21. (Original) A machine readable program storage medium as claimed in claim 20, wherein accessing the proxy based service comprises forwarding said response to the proxy server for processing.

22. (Amended) A machine readable program storage medium, as claimed in claim 21, wherein the ~~on-line service~~ request is sent via a secure connection with the network server and the proxy server is accessed via a connection with the proxy server, the method comprises establishing the connection with the proxy server prior to establishing the connection with the network server.

23. (Amended) A machine readable program storage medium, having stored therein executable code, which when executed on a proxy server, performs a method for the proxy server to provide a proxy server based service to a mobile communications device, the method comprising:

 receiving a request from the mobile communications device to access the proxy server based server;

 processing said request; and

sending the result of said processing to the mobile communications device for forwarding to a network server via a secure connection previously established between the mobile communications device and the network server, wherein the secure connection is established by bypassing the proxy server.

24. (Previously Presented) A machine readable program storage medium as claimed in claim 23, in which the request is in the form of a response generated by an network server in reply to a request from the mobile communications device to access an on-line service provided by the network server, the method then comprising providing a protocol to understand said response.

25. (Amended) A machine readable program storage medium, having stored therein executable code, which when executed by a network server, performs a method for the network server to provide an on-line service to a mobile communications device, the method comprising:

receiving a request from the mobile communications device to the on-line service the request being part of a previously established secure connection between the mobile communications device and the network server, wherein the secure connection is established by bypassing the proxy server;

generating a response to said request, the response indicating what additional information is required by the network server in order to process said request, said response being in a format which is understandable by a proxy server associated with the mobile communications device; and

sending the response to the mobile communications device.

26. (Amended) A mobile communications device comprising:

means for allowing a user to input a request to an on-line service provided by a network server;

means for determining whether additional information is required by the network server in order to service the request;

means for accessing a proxy server based service in order to obtain any additional information required by the network server; and

means for sending a request to the network server, said request including the additional information, wherein the request is part of a secure connection previously established between the mobile communications device and the network server, wherein the secure connection is established by encryption and bypassing the proxy server.

27. (Amended) A proxy server comprising:

means for receiving a request from a mobile communications device;

means for processing the request; and

means for sending the result of said processing to the mobile communications device for forwarding to a network server via a secure connection previously established between the mobile communications device and the network server, wherein the secure connection is established by encryption and bypassing the proxy server.

28. (Amended) A method of using a mobile communications device to access an on-line service provided by a network server, the method comprising:

establishing a connection between the mobile communications device and a proxy server, the proxy server being configured to provide a proxy based service to the mobile communications device;

establishing a second connection between the mobile communications device and a network server, wherein the second connection is a secure connection that co-exists with the first connection, wherein the secure connection is established by encryption and tunneling through the proxy server;

sending a request for information to the network server via the secure connection;

receiving a reply to the request from the network server, the reply being indicative of additional information required by the network server in order to process the request;

using the connection between the mobile communications device and the proxy server to access the proxy server based service, the service being able to provide the additional information;

receiving the additional information from the proxy server via the connection therewith; and

sending an enhanced request to the network server via the secure connection therewith, the enhanced request including the additional information.

29. (Amended) A method for a proxy server to provide a proxy based service to a mobile communications device, the method comprising:

receiving a request from the mobile communications device to access the proxy server based service;

processing said request by generating an enhanced request including additional information provided by the proxy server based service, the additional information being required by a network server in order to service a request for information sent by the mobile communications device via a previously established secure connection with the network server, wherein the secure connection is established by encryption and tunneling through the proxy server; and

sending the enhanced request to the mobile communications device for forwarding to the network server via the previously established secure connection.